MEarticleindex

Decked Out. Corrugated metals may save money in earthquake country. May, p. 42.

Good Conduct. A researcher says that a new membrane textured on the nanoscale will let fuel cells triple the current they can carry. August, p. 28.

The Little Engine. Can a gas turbine with tolerances smaller than a wavelength of light make power more portable than ever? March, p. 30.

Morale Fiber, July, p. 64.

The Rebirth of Cool. The Montreal Protocol dictates that in four years new equipment cannot use the refrigerant R-22. Meeting that deadline is one thing: finding ways to keep us-and the planet-cool in a century is another, January, p. 34.

Shaft, the Sequel. May, p. 64. The Sun Also Raises, October, p. 64. Transmission Impossible. August, p. 64.

ASME Florida Section idle vs. Restart. June, p. 64.

Brown, Alan S.

Brain Drain. A new study affirms that U.S. schools are turning out high-level engineers, but many are returning to their homes abroad. May, p. 44.

The Creative Impulse. You know it when you see it, but just what is that spark that changes things? Is it even a spark? And can a cross-functional team achieve it? Sep-

Fuel Cells Down the Road? Before cars and buses can make their mark, some developers say the best economic case for fuel cell mobility applications may be found in the warehouse. October, p. 36.

Going Mainstream. Cheap systems seek to bring 3-D printing to the masses. June, p. 47.

Greenhorns, Green Choices. Take four grads, one winning business plan, and a scheme to make current run more evenlyit's all business. July, p. 24.

Intelligent Safety. Electronic stability control ises safer vehicles in the future. December, p. 34.

Machines for Life. Smart prosthetics grow in their power to restore lost abilities. December, p. 24.

Nudge of the Asteroids. April, p. 64.

Remodeling the Gulf. Researchers are rethinking the weather of the Gulf to protect investments as well as lives. May, p. 28.

Tiny Machines Replace Electronics in Cell nes. March, p. 64.

Very Light and Fast. Developments in materials, production methods, and turbine design have spawned a new class of business jet. January, p. 24.

The Many and the Few. In a parade of machines, a young engineer saw the principle that everything flows one way, from high to low. July, p. 42.

Butler, Howard

Tracing the Second Law. Modern thermodynamics owes a debt to the contribution of a line of researchers extending back more than a century. July, p. 38.

Are Your People Firefighters? If they are, it's probably wise to alter strategy when dealing with the Asian business community. July, p. 28.

Easton, Peter

Flying High. November, p. 72.

Hutchinson, Harry
Containing Risk. When it comes to handling highly toxic materials, building stronger tank cars is one solution, but shipping a safer substitute is even better. June, p. 32.

Crash Course. The test dummy in a virtual world. December, p. 33.

Design in Virtual Space. The vantage point of the computer is giving designers ever-deeper insights into their craft. August, p. 30.

Aight on Track. A federal drive that looks at issues ng from sleep time to hairline cracks is improving the safety record of U.S. rail traffic. June, p. 26.

Water Without Borders. February, p. 64.

The Substance of Our Styles. One engineer will live for the rules and another will try to rewrite them, but both minds bring valuable insights to the table. February, p. 30.

Kerno, Steven

Continual Career Change. A figure from ancient mythology could change at will to meet challenges. Tomorrow's engineers will need to be that adaptable, too. July, p. 30.

Kreith, Frank, and Ron West

The Road Not Yet Taken. To end our dependence on rapidly dwindling oil supplies, switching to hybrid vehicles and ethanol fuel from corn simply isn't enough. April, p. 24.

Langston, Lee S.

Fahrenheit 3,600. Everywhere you look, the gas turbine industry is running hot. April, p. 34.

Legatski, Mary James Fellows in Service to the Nation. July, p. 37.

The Path to Invention. Some companies have found a way to reach an elusive goal. September, p. 37.

McCormick, David

Seeing Mechanical. A case for advancing the role of sketching in the art of engineering. September, p. 35.

The 2006-2007 ASME Fellows. November, p. 73. Harnessing the Job. Software took convey the 2-D world of electrical schematics into the third dimension. November, p. 40.

Keeping the Rainforest Tropical. When one method posed problems, mechanical engineers turned to an alternate technology to make patrons and animals comfortable at the 200. March, p. 40.

Rehearsal for the Moon. Refining the design of the next idea in space travel. December, p. 40.

Time to Flight. Remodeling the avionics in hundreds of C-130s can't be done in a day, or a year. A manufacturer is working to speed things up. August, p. 36.

Noor, Ahmed K.

Re-engineering Healthcare. The system is in need of repair in the United States, and engineers are uniquely equipped to help fix it. November, p. 22.

Pak, Y. Euger

Korea's Nano Future. Halfway through an ambitious 10-year plan, South Korea is making strides in nanotech. August, p. 26.

Rante, Anthony
Put Your BOM to Work. A well-crafted bill of materials offers keys to improved efficiency. February, p. 28.

Ratzel, Arthur C., III

MEMS From the Nanoscale Up. Before microsystems can fulfill their promise, engineers have to understand that the macroscale rules don't necessarily apply. March, p. 24.

en, Scott, and Amy Babcock

Coal Without Combustion. Researchers want to put it into fuel cells instead of boilers, for cheaper, cleaner electricity. April, p. 30.

Efficiency for the Field. A manufacturer optimizes cooling in the confines of a tractor engine. April, p. 43.

"Ordinary Innovation." The phrase may put everyday inventiveness outside the protection of patents. September, p. 39.

Testa, Bridget Mintz

Licensing Renewed. For the first time in a generation, utilities are starting the regulatory process to build nuclear reactors. For now, it's just a test. October, p. 26.

Thilmany, Jean

Beyond Step. With a new standard, CNC machines can read CAD and CAM files directly. October, p. 41.

Crystal Ball for Business. Future ERP systems will look outside the company, and may be located outside it, too. March, p. 36.

Engineering Meets Manufacturing. Software that links engineering and manufacturing may be around the corner, but it's not here yet. December, p. 20.

Give It Time. Data acquisition techniques give researchers insights into fields outside the realm of machines. November, p. 28.

Into the Fold. Tying all company technologies through one PLM system. February, p. 36.

Looking Into the Fire. Is biodiesel a potential sme source? Models of engine combustion aim to assure that it doesn't become one. April, p. 40,

Mastery of the Complex. After a half-century of development, CAD continues to extend control over the design of ever-more-challenging systems. Septem-

No Life on Mars. January, p. 64.

Online and in Synch. Systems and negotiation theory has a lot to tell us about collaborative design. June, p. 40. Solid X-Ray. Advances in rapid prototyping give the

technology new roles in medical treatments. July, p. 34. Tying Two Forces. Software upgrades have made analyzing for fluid and structural interaction easier and more common than in the past but, alas, not much quicker. May, p. 34.

Villain of Sand. September, p. 64.

Where Does CAM Stand? Researchers are pushing to get more manufacturing assistance from the computer. January, p. 30.

50 Years of Nuclear Power. In the depths of the Cold War, Atoms for Peace produced landmark results. November, p. 36.

Plastic Arts. The chemistry that has formed so many of the objects in our world traces its roots to an accidental discovery 100 years ago. June, p. 44.

Pressure's On. Or, how Fulton's steamboat launched our modern world. October, p. 44.

Winters, Jeffrey Carbon Loaded. April, p. 38.

Dream Machine. The people who spurred the development of a private space plane have set their sights on a more difficult task: a high-efficiency car that even Homer Simpson would love. June, p. 36.

Extra Credit. Thanks to an innovative program, engineering students get a look at state-of-the-art facilities.

Fly Silent, Fly Cheap. When a team of engineers set out to design the world's quietest airliner, they discov ered that a silent airplane would be an efficient one. Feb-

Junking the Joystick. Medical researchers have discovered that the best way to operate microscale devices is through intuitive controls. March, p. 34.

Power Points. Nanoscale materials may soon revolutionize energy storage. August, p. 22.

Squeeze Play. October, p. 40. Turnaround. What's driving the need to revise ASME's bioprocessing engineering standard after only two years? December, p. 30,

Wedge Factor. Are there 51 small ways to curb global warming-or maybe just one? A mechanical engineering professor says the best method to curb greenhouse gas emissions is to tackle the problem in a few medium-size chunks. October, p. 31.

Wolcott, Barb

Filling the Void. To attract women to engineering in greater numbers, some suggest, they must be able to see how they are making a difference. February, p. 24.

The Injunction Factor. A power that patent holders once held over infringers isn't as certain these days. January, p. 38.

Voods, Robert O. Oh, What a Web We Punch. December, p. 64.

Straight and True, Masters of many arts, the craftsmen of early firearms advanced the standard of precision manufacturing, May, p. 38.